

**WHAT IS CLAIMED IS:**

1. For use with a satellite radio receiver having a  
2 demodulator and a perceptual decoder, a system for recording and  
3 playing back data, comprising:

4       a buffer;

5           a recorder controller, coupled to said buffer, configured to  
6 intercept a data stream flowing from said demodulator to said  
7 perceptual decoder during operation of said satellite radio  
8 receiver and cause a portion of said data stream to be stored in  
9 said buffer; and

10          a playback switch, coupled to said recorder controller,  
11 configured to receive an external command that causes said recorder  
12 controller to substitute said portion stored in said buffer for  
13 said data stream flowing from said demodulator.

2. The system as recited in Claim 1 wherein said data stream  
2 comprises audio data and coordinated lyrics data.

3. The system as recited in Claim 1 wherein said buffer is  
2 embodied in a portion of a satellite signals delay memory.

4. The system as recited in Claim 1 wherein said recorder  
2 controller is configured to operate continually to cause said  
3 portion of said data stream to be stored in said buffer.

5. The system as recited in Claim 1 wherein said satellite  
2 radio receiver further has a channel selector and said portion of  
3 said data stream is a single channel.

6. The system as recited in Claim 1 wherein said external  
2 command causes said recorder controller to substitute said portion  
3 stored in said buffer beginning at a defined program point.

7. The system as recited in Claim 1 further comprising an  
2 external memory interface, coupled to said recorder controller,  
3 configured to receive said portion stored in said buffer.

8. For use with a satellite radio receiver having a  
2 demodulator and a perceptual decoder, a method of recording and  
3 playing back data, comprising:

4 intercepting a data stream flowing from said demodulator to  
5 said perceptual decoder during operation of said satellite radio  
6 receiver;

7 buffering a portion of said data stream; and

8 receiving an external command that causes said recorder  
9 controller to substitute said portion stored in said buffer for  
10 said data stream flowing from said demodulator.

9. The method as recited in Claim 8 wherein said buffering  
2 is carried out in a portion of a satellite signals delay memory.

10. The method as recited in Claim 8 wherein said buffering  
2 is performed continually.

11. The method as recited in Claim 8 further comprising:  
2 selecting a channel from said data stream; and  
3 only buffering said channel.

12. The method as recited in Claim 8 wherein said external  
2 command causes said substituting to begin at a defined program  
3 point in said portion.

13. The method as recited in Claim 8 further comprising  
2 transmitting said portion to an external memory interface.

14. A karaoke satellite radio receiver, comprising:

2       a demodulator configured to receive a plurality of channels,  
3       including a data channel;

4       a channel selector, coupled to said demodulator, configured to  
5       select at least said data channel;

6       a visual display configured to display at least accompanying  
7       text; and

8       a text manager, coupled to said visual display, configured to  
9       extract said accompanying text from said data channel and cause  
10      said visual display to display said accompanying text in  
11      coordination with audio being played by said receiver.

15. The receiver as recited in Claim 14 further comprising:

2       a buffer;

3       a recorder controller, coupled to said demodulator and said  
4       buffer, configured to intercept said data channel flowing from said  
5       demodulator during operation of said receiver and cause a portion  
6       of said data channel to be stored in said buffer; and

7       a playback switch, coupled to said recorder controller,  
8       configured to receive an external command that causes said recorder  
9       controller to substitute said portion stored in said buffer for  
10      said data channel flowing from said demodulator.

16. The receiver as recited in Claim 14 wherein said channel  
2 selector is configured to select both said data channel and an  
3 associated audio channel, said audio channel providing said audio.

17. The receiver as recited in Claim 14 wherein said channel  
2 selector is configured to select only said data channel, said data  
3 channel including audio data, said audio data being decoded to  
4 provide said audio.

18. The receiver as recited in Claim 14 wherein said  
2 accompanying text is lyrics and said audio is music.

19. The receiver as recited in Claim 14 wherein said data  
2 channel comprises musical instrument device interface (MIDI)  
3 synthesizer commands.

20. A method of playing karaoke satellite radio, comprising:  
2 receiving a plurality of channels, including a data channel;  
3 selecting at least said data channel;

4 extracting accompanying text from said at least said data  
5 channel; and

6 causing said visual display to display said accompanying text  
7 in coordination with audio being played by said receiver.

21. The method as recited in Claim 20 wherein said selecting  
2 comprises selecting both said data channel and an associated audio  
3 channel, said audio channel providing said audio.

22. The method as recited in Claim 20 wherein said selecting  
2 comprises selecting only said data channel, said data channel  
3 including audio data, said audio data being decoded to provide said  
4 audio.

23. The method as recited in Claim 20 wherein said  
2 accompanying text is lyrics and said audio is music.

24. The method as recited in Claim 20 further comprising  
2 responding to musical instrument device interface (MIDI)  
3 synthesizer commands to play said audio.

25. A karaoke satellite radio service, comprising:

2       a database of audio data and accompanying text;

3       a program manager, coupled to said database, configured to  
4       select portions of said audio data and accompanying text from said  
5       database for broadcast; and

6       a transmitter, coupled to said program manager, configured to  
7       transmit a plurality of channels, including a data channel  
8       containing at least said accompanying text and control data that  
9       allows a display of said text to be coordinated with a playback of  
10      said audio.

26. The service as recited in Claim 25 wherein said

2       transmitter provides said audio data on an audio channel separate  
3       from said data channel.

27. The service as recited in Claim 25 wherein said

2       transmitter includes said audio data in said data channel.